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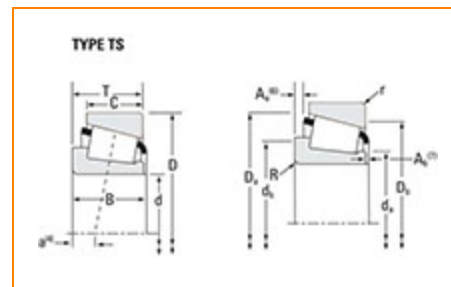
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## Part Number L44649 - L44610, Tapered Roller Bearings - TS (Tapered Single) Imperial

This is the most basic and most widely used type of tapered roller bearing. It consists of two main separable parts: the cone (inner ring) assembly and the cup (outer ring). It is typically mounted in opposing pairs on a shaft.



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## Specifications

|                                   |                               |
|-----------------------------------|-------------------------------|
| <b>Series</b>                     | L44600                        |
| <b>Cone Part Number</b>           | KL44649                       |
| <b>Cup Part Number</b>            | KL44610                       |
| <b>Design Unit</b>                | Inch                          |
| <b>Cage Material</b>              | Stamped Steel                 |
| <b>Related Assembly Number(s)</b> | KL44649-902M1<br>L44649-9X062 |

## Dimensions

|                               |           |
|-------------------------------|-----------|
| <b>d - Bore</b>               | 1.0625 in |
| <b>D - Cup Outer Diameter</b> | 1.9800 in |
| <b>B - Cone Width</b>         | 0.5800 in |
| <b>C - Cup Width</b>          | 0.4200 in |
| <b>T - Bearing Width</b>      | 0.5600 in |

## Abutment and Fillet Dimensions

|  |          |
|--|----------|
| <b>R - Cone Backface "To Clear" Radius<sup>1</sup></b> | 0.14 in  |
| <b>r - Cup Backface "To Clear" Radius<sup>2</sup></b>  | 0.050 in |
| <b>da - Cone Frontface Backing Diameter</b>            | 1.22 in  |
| <b>db - Cone Backface Backing Diameter</b>             | 1.48 in  |
| <b>Da - Cup Frontface Backing Diameter</b>             | 1.87 in  |
| <b>Db - Cup Backface Backing Diameter</b>              | 1.75 in  |
| <b>Ab - Cage-Cone Frontface Clearance</b>              | 0.05 in  |
| <b>Aa - Cage-Cone Backface Clearance</b>               | 0.02 in  |
| <b>a - Effective Center Location<sup>3</sup></b>       | -0.13 in |

## Basic Load Ratings

|  |                    |
|--|--------------------|
| <b>C90 - Dynamic Radial Rating (90 in revolutions)<sup>4</sup></b> | 1750 lbf<br>7790 N |
|--|--------------------|

|  |                     |
|--|---------------------|
| C1 - Dynamic Radial Rating (1 million revolutions) <sup>5</sup>                | 6760 lbf<br>30100 N |
| <b>C0 - Static Radial Rating</b>   | 7400 lbf<br>32900 N |
| C <sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions) <sup>6</sup> | 1120 lbf<br>4990 N  |

## Factors

|   |        |
|---|--------|
| K - Factor <sup>7</sup>                             | 1.56   |
| e - ISO Factor <sup>8</sup>                         | 0.37   |
| Y - ISO Factor <sup>9</sup>                         | 1.6    |
| <b>G1 - Heat Generation Factor (Roller-Raceway)</b> | 8.9    |
| <b>G2 - Heat Generation Factor (Rib-Roller End)</b> | 8.9    |
| C <sub>g</sub> - Geometry Factor <sup>10</sup>      | 0.0526 |

<sup>1</sup> These maximum fillet radii will be cleared by the bearing corners.

<sup>2</sup> These maximum fillet radii will be cleared by the bearing corners.

<sup>3</sup> Negative value indicates effective center inside cone backface.

<sup>4</sup> Based on  $90 \times 10^6$  revolutions  $L_{10}$  life, for The Timken Company life calculation method.  $C_{90}$  and  $C_{a90}$  are radial and thrust values.

<sup>5</sup> Based on  $1 \times 10^6$  revolutions  $L_{10}$  life, for the ISO life calculation method.

<sup>6</sup> Based on  $90 \times 10^6$  revolutions  $L_{10}$  life, for The Timken Company life calculation method.  $C_{90}$  and  $C_{a90}$  are radial and thrust values for a single-row,  $C_{90(2)}$  is the two-row radial value.

<sup>7</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>8</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>9</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>10</sup> Geometry constant for Lubrication Life Adjustment Factor a3l.